Board Research Initiative Request for Proposals

Combating Turkey Coronavirus in the Turkey Industry

Background

Turkey coronavirus (TCV) is a highly contagious viral enteric disease affecting turkeys and occurs in most turkey-producing regions worldwide. Clinical signs can range from subclinical infections to severe diarrhea, high morbidity, and mortality. Infected flocks may show depression, anorexia, reduced weight gain, and increased feed conversion, while breeder hens infected during lay may experience a drop in egg production. TCV is shed in feces and spreads within flocks through ingestion of contaminated litter or fecal material, and it can also spread between farms via contaminated equipment, insects, people, and other vectors. Outbreak control requires quarantine of affected farms, controlled marketing, or depopulation. Surveillance and diagnosis rely on PCR testing of intestinal or environmental samples, serology, and virus isolation in embryonating eggs. Outbreaks of TCV are sporadic and vary in duration. Currently, no licensed vaccine is available for TCV in the United States.

Research Areas

- Epidemiology of TCV
 - Characterize the occurrence and distribution of TCV within and between turkey flocks.
- Identification of Potential Seasonal Reservoirs
 - o Determine if specific environmental, avian, or insect reservoirs contribute to seasonal outbreaks of TCV.
- Characterization of Viral Transmission Routes
 - o Investigate all potential pathways of TCV spread, including fecal-oral transmission, contaminated equipment, insects, personnel, and other vectors.

Proposal Submission

Researchers should submit only a maximum two-page pre-proposal summary that describes the parts of the objectives they wish to address and what they propose to do. A title, the researcher's name, affiliation, and email address should be included in the pre-proposal. Details of procedures or specifics of the budget should not be included in the pre-proposal submission. Pre-proposals should be submitted electronically at: https://www.uspoultry.org/programs/research/.

DEADLINE FOR PRE-PROPOSAL SUBMISSION IS NOVEMBER 3, 2025.

The outcome of the pre-proposal review will be one of three responses from USPOULTRY:

- Send a full research proposal for consideration.
- Please make specific modifications in what you are proposing and send a full proposal.
- Do not send a full research proposal.

Full proposals will follow established USPOULTRY guidelines as seen at www.uspoultry.org. Funds can be used for graduate students, technicians, research supplies, and work and meeting

travel. Funds cannot be used for professional (faculty or postdoc) salaries or equipment purchase. Up to 15% overhead is allowed. No budget, including overhead, may exceed \$125,000.